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UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF CALIFORNIA

THE LARYNGEAL MASK COMPANY
LTD. and LMA NORTH AMERICA,
INC.,

Plaintiffs,

v.

AMBU A/S, AMBU INC. and AMBU
LTD.

Defendants.

AMBU A/S, AMBU INC. and AMBU
LTD.,

Counterclaimants,

v.

THE LARYNGEAL MASK COMPANY
LTD. and LMA NORTH AMERICA,
INC.,

Counter-Defendants.

Case No. 3:07-CV-01988 DMS-NLS

**DEFENDANTS AMBU A/S, AMBU INC. and
AMBU LTD. RESPONSIVE CLAIM
CONSTRUCTION BRIEF**

Judge: Hon. Dana M. Sabraw

Date: January 26, 2009

Time: 9:00 a.m.

Courtroom: 10, 2nd Floor

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1 **I. INTRODUCTION**

2 LMA's briefing to the Court seems to suggest that the laryngeal mask designs at issue in
3 this lawsuit have been the subject of extensive peer-reviewed publications and their safety well-
4 established. The fact LMA left out of that discussion is that the LMA devices sold to date have
5 never used the invention(s) of the '100 patent. Faigal Decl. ¶ 2, Ex. A (LMA Response to Ambu
6 Interrogatory No. 6) ("LMA has not manufactured or sold any products covered by any claims of
7 the '100 patent"). Accordingly, this patent dispute is about an invention that not even LMA has
8 deployed.

9 Separate and apart from the question of the value of the patented invention is the question
10 of its scope. LMA has in a number of instances suggested constructions to the Court that, instead
11 of providing meaning to the claim limitations, read them as if they were not in the claims at all.
12 In addition, LMA attempts to confuse the Court with extensive citation to cases applying claim
13 construction rules that were overruled some time ago. LMA also advances misleading legal
14 arguments about not reading in limitations from the specification, and about apparatus vs. method
15 claims, issues that are not in fact problems with the constructions advanced by Ambu.

16 Simply put, this Court's task is to construe the disputed claim terms based on a close
17 reading of the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315-17 (Fed. Cir. 2005) (*en*
18 *banc*) ("The descriptive part of the specification aids in ascertaining the scope and meaning of the
19 claims inasmuch as the words of the claims must be based on the description. The specification is,
20 thus, the primary basis for construing the claims.") (quoting *Standard Oil v. Am. Cyanamid Co.*,
21 774 F.2d 447, 452 (Fed. Cir.1985)). In fact, the specification acts as a "dictionary, which
22 explains the invention and may define terms used in the claims." *Markman v. Westview*
23 *Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995).

24 LMA's attempt to mislead the Court into believing that any reliance on the specification
25 improperly reads limitations into the claims, should be rejected; the modern rule is that the
26 specification is the "single best guide to the meaning of a disputed term" and "[u]sually *it is*
27 *dispositive.*" *Phillips*, 415 F.3d at 1315 (quoting *Vitronics Corp. v. Conceptronic*, 90 F.3d 1576,
28 1582 (Fed. Cir. 1996)) (emphasis added). It is not error to follow the Federal Circuit's guidance.

1 **II. APPLICABLE LEGAL STANDARDS**

2 **A. Claim Terms at the Center of Infringement or Invalidity Disputes Must Be**
 3 **Construed**

4 LMA attempts to lead the Court into error by asking it not to construe certain claim terms
 5 despite the fact that it admits they are material to a non-infringement dispute. Where the meaning
 6 of the phrase is in dispute and if the question of infringement will turn on the meaning of the
 7 phrase, it must be construed by the court. In fact, the Federal Circuit has repeatedly reversed jury
 8 verdicts where the district court judge declined to construe a claim term or instructed the jury that
 9 only the ordinary meaning of the claim term need apply. *See, e.g., O2 Micro Int'l Ltd. v. Beyond*
 10 *Innovation Tech. Co., Ltd.*, 521 F.3d 1351 (Fed. Cir. 2008); *Seachange Int'l, Inc. v. C-COR Inc.*,
 11 413 F.3d 1361 (Fed. Cir. 2005). In *O2 Micro*, the Federal Circuit held that the district court erred
 12 by failing to construe the term “only if.” *O2 Micro*, 521 F.3d at 1361-1362. Despite the
 13 plaintiff's argument that “only if” is a common term that should not be construed, the court held
 14 that the district court erred by not construing the term because the parties disputed its meaning,
 15 and that dispute was relevant to whether there was infringement. In other words, it is not enough
 16 to say that a claim term has an ordinary meaning, if there is a material dispute over the application
 17 of that term. Similarly, in *Seachange*, the Federal Circuit recognized that the defendant was
 18 prejudiced by the district court's failure to construe the term “distributed computer system,” and
 19 as a result reversed the denial of a new trial on infringement. 413 F.3d at 1365.

20 LMA's contention that only the terms “backplate,” “cuff,” and “distal rib” must be
 21 construed would thus lead the Court into error. Pl.'s Opening Claim Construction Brief at 9.
 22 Ambu disagrees with LMA on the construction of the terms “distal region,” “the cuff being
 23 attached to the backplate,” “at least a portion of the posterior portion of a wall of the cuff in the
 24 distal region being thicker and stiffer than other portions of the cuff,” “more compliant than the
 25 backplate,” “proximal portion of the passage,” and “passage axis,” and since the meaning of these
 26 terms are at issue in various non-infringement and invalidity arguments, the Court should
 27
 28

1 construe these terms.¹

2 **B. Claim Terms Cannot Be Broader Than the Invention Described in the**
3 **Specification**

4 Because LMA's proposed construction of a number of terms is divorced from the
5 specification and broader than described therein, it must be rejected. It is well established that
6 claim terms must be construed in light of the specification, as it is the "single best guide to the
7 meaning of a disputed term," and "[u]sually it is dispositive." *Phillips*, 415 F.3d at 1315 quoting
8 *Vitronics Corp. v. Conceptronic*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). Although a patent's scope
9 is not necessarily limited to an embodiment discussed in the specification, "neither do the claims
10 enlarge what is patented beyond what the inventor has described as his invention." *Inpro II*
11 *Licensing S.A.R.L. v. T-Mobile USA, Inc.*, 450 F.3d 1350, 1355 (Fed. Cir. 2006) . This means that
12 "the scope of and outer boundary of claims is set by the patentee's description of his invention."
13 *On Demand Machine Corp. v. Ingram Industries, Inc.*, 442 F.3d 1331, 1338 (Fed. Cir. 2006)
14 (citing *Philips*, 415 F. 3d at 1313-14). Put another way, "the claims cannot be of broader scope
15 than the invention that is set forth in the specification." *Id.* at 1340.

16 If a claim term is repeatedly and consistently used in the specification to include a certain
17 structure, the claim term must be construed to include the structure even if it is not explicitly
18 recited in the claim language. *See e.g., On Demand Machine Corp.*, 442 F.3d at 1339-40 (Federal
19 Circuit reversed a district court's broad interpretation of the term "customer" as not limited to a
20 *retail* customer, where the specification "repeatedly reinforce[d] its usage of the term 'customer'
21 as the retail customer"); *Mangosoft, Inc. v. Oracle Corp.*, 525 F.3d 1327, 1330 (Fed. Cir. 2008)
22 ("[Plaintiff's] construction would read 'local' to mean something beyond the breadth of anything
23 in the claims or specification The problem is that nothing in the intrinsic record describes or
24 supports such an expansive meaning.").

25 The rule that LMA cites on not reading in new claim limitations from the specification is
26 not violated by construing terms already in the claims in light of the specification. For example,

27 ¹ LMA has not identified any infringement or validity issues for which the remaining claim
28 terms "laryngeal inlet," "at least a portion," "posterior," "anterior surface," and "acute," are
relevant. These terms, thus, do not appear to require construction by the Court at this time.

1 in *Curtiss-Write Flow Control Corp. v. Velan, Inc.*, 438 F.3d 1374, 1378-80 (Fed. Cir. 2006), the
2 Federal Circuit found “commendable” the district court’s reluctance to narrow the claims to the
3 preferred embodiment. *Id.* at 1379. However, it overruled a generic construction of the term
4 “adjustable” as found in a dictionary and explained that “this case does not evince a situation
5 where a party is attempting to import a limitation from the specification into the claims. Claim
6 14 already contains the ‘adjustable’ limitation. ... In light of the specification the term
7 ‘adjustable’ means that the dynamic, live loaded seat can be adjusted while the de-heading system
8 of claim 14 is in use.” *Id.* at 1379-80 (emphasis added).

9 The *Phillips en banc* decision of the Federal Circuit overruled a line of prior cases from
10 the Federal Circuit that applied the broadest possible plain English meaning of claim terms to
11 them unless there was a “clear disavowal” of that meaning in the specification, and instead placed
12 ultimate emphasis on the meaning of the specification. *Phillips* stated that the discredited
13 approach had resulted in “unduly expansive” claim constructions. *Phillips*, 415 F.3d at 1321. In
14 an apparent attempt to lead the Court into error, LMA cites extensively from cases applying this
15 outdated rule. Specifically, LMA cites *Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc.*,
16 340 F.3d 1298 (Fed. Cir. 2003),² and *Johnson Worldwide Assocs. v. Zebco Corp.*, 175 F.3d 985
17 (Fed. Cir. 1999), to support its overbroad constructions. LMA’s attempt to lure the Court into
18 adopting unduly broad claim constructions by virtue of reliance on outdated authority should be
19 rejected.³

20 Cases applying the *Phillips* analysis are plentiful at this point, and show that the Court is
21 in fact to construe the claim terms to give them the meanings found in the patent specification.
22 *E.g., Decision.com, Inc. v. Federated Dep’t Stores, Inc.*, 527 F.3d 1300, 1307-1308 (Fed. Cir.
23 2008) (construing the term “remote interface” as excluding consumer-owned personal computers,

24 _____
25 ² *Anchor Wall Sys.* relies on *Texas Digital Sys., Inc. v. Telegenix Inc.*, 308 F.3d 1193, 1202 (Fed.
26 Cir. 2002). However, in *Phillips*, the Federal Circuit disapproved of the *Texas Digital* line of
cases and the clear disavowal rule as one that “improperly restricts the role of the specification in
claim construction.” *Phillips*, 415 F.3d 1303, 1320. *Johnson* applied this same discredited rule.

27 ³ LMA also cites a case, *American Academy of Science Tech. Center*, 367 F.3d 1359, 1369 (Fed.
28 Cir. 2004), that itself recognizes it is applying a different rule for claim construction than that to
be applied by district court judges.

1 because features important for achieving the invention's stated purpose would not be associated
 2 with such computers); *Honeywell Int'l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1317-19 (Fed. Cir.
 3 2006) (limiting the term "fuel injection system component" to "fuel filter," where a fuel filter was
 4 the only component disclosed in the written description and was described as the "present
 5 invention"); *Microsoft Corp. v. Mutli-Tech Sys., Inc.*, 357 F.3d 1340 (Fed. Cir. 2004) (limiting
 6 claims to communication over a telephone network because no mention of digital networks was
 7 made); *On Demand*, 442 F.3d at 1339-1340 (limiting the term "customer" to mean a retail
 8 customer where the specification repeatedly reinforced such meaning); *Mangosoft*, 525 F.3d at
 9 1330 (limiting the term "local" to the network described in the intrinsic record).

10 LMA also erroneously attempts to give the '100 patent additional claim scope by referring
 11 to the oft used language in a patent that purports to disclaim that the patent is restricted to the
 12 disclosed embodiments. Pl.'s Opening Claim Construction Brief at 16 n.7. However, such
 13 language does not broaden the scope of the claims beyond what is actually taught in the
 14 specification. *See Atmel Corporation v. Information Storage Devices*, 198 F.3d 1374, 1382 (Fed.
 15 Cir. 1999) (during claim construction, the knowledge of one of the ordinary skill in the art cannon
 16 substitute for, but "may only be employed in relation to structure that is disclosed in the
 17 specification.").

18 C. Proper Role of Expert Testimony

19 In addition to the intrinsic evidence, courts have discretion to refer to extrinsic evidence to
 20 guide and instruct when construing patent claim terms. *See Phillips*, 415 F.3d at 1318-19
 21 ("[E]xtrinsic evidence in the form of expert testimony can be useful to a court for a variety of
 22 purposes . . ."). It is appropriate for the trial court to refer to expert testimony "to provide
 23 background on the technology at issue, to explain how an invention works, to ensure that the
 24 court's understanding of the technical aspects of the patent is consistent with that of a person of
 25 skill in the art, or to establish that a particular term in the patent or the prior art has a particular
 26 meaning in the pertinent field." *Id.* at 1318. Accordingly, it is appropriate for the Court to refer
 27 to the declarations of Dr. Samsun Lampotang when construing the disputed claim terms. *B-K*
 28 *Lighting, Inc. v. Vision3 Lighting*, 2008 U.S. Dist. LEXIS 96940 at **24-25 (C.D. Cal. March 13,

2008).

III. PROPER CONSTRUCTION OF THE '100 PATENT

A. The Court Should Adopt Ambu's Proposed Construction of the Term "Backplate" as Used in Claim 1

The Court should construe the term "backplate" to mean "[t]he relatively rigid mask structure of a laryngeal mask airway device, separate from the airway tube to which it is attached at a tube joint and on which a separate inflatable cuff is made fast, as by gluing or welding together the two separate items." Defendants' Opening Claim Construction Brief at 12. This construction properly comports with the specification, which consistently describes the backplate as including a tube joint and describes it as being separate from, but attached to, the cuff. Dr. Lampotang Opening Decl. ¶ 35, Ex. C ('100 patent, col. 1, lns. 56-58; col. 7, lns. 58-61); *see also* Declaration of Dr. Samsun Lampotang in Support of Defendants' Responsive Claim Construction Brief ("Dr. Lampotang Resp. Decl."), ¶¶ 24, 27.

1. **LMA's Proposed Construction is Contrary to the Specification**

LMA's proposed construction "backplate," on the other hand, is contrary to the specification. LMA's proposed construction of "backplate" would result in claim 1 covering a broader invention than that described in the specification, and thus must be rejected. LMA itself recognizes this problem and attempts to explain it away by asserting that those detailed discussions of the "backplate" in the specification should just be disregarded. LMA, however, "is not entitled to a claim construction divorced from the context of the written description and prosecution history." *Nystrom v. Trex Co.*, 424 F.3d 1136, 1144-1145 (Fed. Cir. 2005).

The specification does not describe a backplate generically as anything of any shape surrounded by a cuff, but rather very specifically describes it by its parts and function. Its parts include a "bowl and a tube-joint." Dr. Lampotang Opening Decl., ¶ 35, Ex. C ('100 patent, col. 6, lns. 3-5). Indeed, every single figure in the '100 patent shows a backplate (numeral 52 or 52a) with a tube joint (numeral 92 or 92a), further evidencing that a tube joint is an integral structural component of the backplate. *Id.* ('100 patent, Figs. 1-11).

The specification also describes the functional benefits of this backplate design. One

1 purpose of the backplate is to make the device more rigid for easy insertion. *Id.* at ¶ 37, Ex. C
2 ('100 patent, col. 7, lns. 47-50). Another purpose is to provide a means of connecting the airway
3 tube to the opening of the mask. Dr. Lampotang Resp. Decl., ¶ 24. This is done via the tube-joint
4 portion of the backplate. *Id.* Further, the backplate is used to ensure proper placement in the
5 throat when the device is fully inserted, which as taught by the specification, is achieved by
6 aligning the passage of the tube-joint portion of the backplate at an acute angle in relation to the
7 bowl plane. *See* Dr. Lampotang Opening. Decl., ¶ 24.

8 Relying on the first two paragraphs of the "Summary of the Invention," which do not use
9 the term "tube joint" verbatim, LMA argues that the term "backplate" does not require a tube
10 joint because the tube joint is "irrelevant to the claimed invention." Plaintiffs' Opening Brief at
11 11. However, LMA's argument is based on the false premises that the first two paragraphs of the
12 "Summary" somehow constitute the entire description of the claimed invention, and that the rest
13 of the specification is superfluous during claim construction. LMA cites no case holding that, and
14 in fact, that is not the rule. In fact, the Court should review the entire patent specification, of
15 which the claims are a part. *E.g., Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.
16 Cir. 1996); *Markman*, 52 F.3d at 979.

17 Moreover, contrary to LMA's assertion, the first two paragraphs do in fact emphasize
18 that a tube joint is part of the invention. Those paragraphs state that the invention comprises "a
19 flexible airway tube and a mask *attached to one end of the airway tube.*" The specification does
20 not teach any manner to connect the airway tube and mask except by use of a tube joint. *See* Col.
21 7, lns. 53-61. Thus, a tube joint is a necessary part of the invention described in those first two
22 paragraphs. *See On Demand Machine Corp.*, 442 F.3d at 1339-40 (holding that the term
23 "customer" should have been construed to mean *retail* customer, where the specification
24 "repeatedly reinforce[d]" this meaning); *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858,
25 864-66 (Fed. Cir. 2004) (affirming the district court's decision to construe the term "plug," in a
26 patented device to treat hernias, to be pleated in shape because the specification consistently
27 described a "plug" as pleated despite one seemingly broader statement in one paragraph of the
28 specification that omits this description of the shape).

1 [REDACTED]
 2 [REDACTED]
 3 [REDACTED] The '100 patent's specification makes clear that an airway tube is not part of the
 4 backplate. Dr. Lampotang Opening Decl. ¶ 36, Ex. C ('100 patent, col. 1, lns. 56-58; col. 7 lns.
 5 58-61); *see also* Dr. Lampotang Resp. Decl. ¶ 24. [REDACTED]
 6 [REDACTED]
 7 [REDACTED]
 8 [REDACTED]
 9 [REDACTED]
 10 [REDACTED]

11 Seeking to avoid this fact, LMA attempts to broaden the scope of the meaning of
 12 "backplate" to include embodiments that are constructed as a "unitary piece" with the cuff, and
 13 have no tube joint at all. There are several problems with LMA's approach. First, LMA cites
 14 *Anchor Wall Systems, Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298 (Fed. Cir. 2003), as
 15 support for its approach. However, *Anchor Wall* relies on the rejected *Texas Digital* line of cases,
 16 and thus the approach it illustrates is contrary to *Phillips*. *See supra* at Sec. II.B. [REDACTED]
 17 [REDACTED]
 18 [REDACTED]
 19 [REDACTED]

20 Moreover, in the *Anchor Wall* specification, it
 21 expressly said that the protrusions at issue "may take any number of shapes," with examples of
 22 kidney shapes, dogbone shapes, etc. Here, there is no such further teaching of alternative
 23 constructions.

24 Second, LMA incorrectly argues that a patent incorporated by reference into specification,
 25 U.S. Patent No. 5,355,879, shows that a tube-joint is not a necessary part of the backplate. *See*
 26 Plaintiffs' Opening Brief at 11, fn. 4. Contrary to LMA's assertion, however, the '879 patent
 27 repeatedly mentions a tube-joint, albeit by a different name.

28 The section of the '879 patent that LMA cites in fact describes a laryngeal mask (Figure 3,
 as depicted below) that explicitly includes both a backplate and a tube joint:

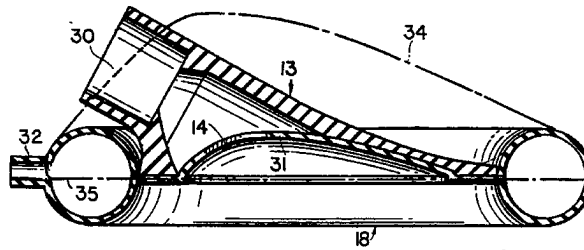


FIG. 3

First, it describes the “backplate “or “body” 13 of the mask, and then it describes “socket 30 of body 12, for assembly to the airway tube 11.” Declaration of Joshua Stowell in Support of Plaintiffs’ Opening Claim Construction Brief ¶5, Ex. D (’879 patent, col. 2, lns. 53-58; col. 3, lns. 22-24; Fig. 3.). This is the same as a tube joint. Moreover, this feature is claimed in independent claims 7 and 13 of the ’879 as “an airway tube connecting formation.” Accordingly, the ’879 patent specification emphasizes that the tube joint and its airway connection are in fact a distinct feature of the invention. See *V-Formation, Inc. v. Benetton Group Spa*, 401 F.3d 1307, 1311 (Fed. Cir. 2005) (“This court has established that prior art cited in a patent or cited in the prosecution history of the patent constitutes intrinsic evidence ... when prior art that sheds light on the meaning of a term is cited by the patentee, it can have particular value as a guide to the proper construction of the term, because it may indicate not only the meaning of the term to persons skilled in the art, but also that the patentee intended to adopt that meaning.”) (citations omitted).

LMA next asserts that Ambu’s construction improperly imports limitations from the specification. With this request, LMA is asking this Court to do exactly what the Federal Circuit rejected in *Nystrom* and *C.R. Bard* – that is, adopt a broad construction despite a narrower usage of the term in the specification. LMA’s attempt to construe “backplate” to mean any generic more rigid “body” is similar to the patentee’s attempt in *Nystrom* to construe claimed “board” for use in flooring surfaces to mean “an item made of a rigid material,” but not necessarily wood cut from a log. 424 F.3d at 1142. In support of its position, the patentee relied on the fact that the claim language did not expressly recite wood. *Id.* The defendant, on the other hand, argued that the specification consistently described a “board” as wood cut from a log and thus it was proper to construe “board” as “wood cut from a log.” *Id.* Because the specification consistently

described a “board” as wood cut from a log, the Federal Circuit rejected the patentee’s generic construction and construed “board” more narrowly to mean “wood cut from a log.” *Id.* at 1145.

Similarly, in *C.R. Bard*, the Federal Circuit affirmed the construction of the term “plug,” from a device used to treat hernias that was narrower than the claim language implied. 388 F.3d 858. The definition of the plug in the specification controlled over the ordinary dictionary or customary meaning of plug. *Id.* at 863. The specification twice, in the Summary of Invention and in the Abstract, described “the invention” as having a pleated plug. *Id.* at 864.

Here, the ‘100 patent consistently describes the backplate as including a tube joint. Dr. Lampotang Opening Decl., ¶35, Ex. C (‘100 patent, col. 1, lns. 56-58; col. 7, lns. 58-61). Therefore, LMA’s attempt at a broader construction should be rejected because the Court should “take the patentee at its word and . . . not construe the scope of the . . . patent’s claims more broadly than the patentee itself clearly envisioned,” as described in the patent’s written description. *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004).

2. The Prosecution History Does Not Support LMA’s Proposed Construction

LMA argues that because a tube-joint was expressly recited in some of the original claims but not recited in that form in these issued claims, the Court should disregard the description of backplate in the specification and construe it to not require a critical part, a tube-joint. However, regardless of any intent expressed by a patentee to broaden the scope of a claim during prosecution, the claim may be construed no broader than what is taught by the patent. *See Honeywell Int’l.* 452 F.3d at 1319 (Fed. Cir. 2006) (“Where, as here, the written description clearly identifies what his invention is, an expression by the patentee during prosecution that he intends his claims to cover more than what his specification discloses is entitled to little weight.”). In *Honeywell*, the claim term at issue was “fuel injection system component.” The patent holder argued that it had been broadened during prosecution by changing the term “fuel filter” to the broader term “fuel injection system component.” *Id.* The Federal Circuit rejected that argument, because the patent clearly taught that a fuel filter was the invention and did not disclose any novel components other than a fuel filter. *Id.*

Here, throughout the specification, the “tube-joint” is described as an integral part of the backplate. Dr. Lampotang Opening Decl., ¶35, Ex. C (‘100 patent, col. 1, lns. 56-58; col. 7, lns. 58-61). As noted above, even the two paragraphs of the “Summary of the Invention” heavily relied upon by LMA indicate that “the invention” includes a tube-joint.

Furthermore, the Federal Circuit has warned against allowing the back and forth with the PTO trump the specification, except, of course, as to disclaimers. *See Phillips*, 415 F.3d at 1317 (noting that “because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the clarity of the specification and thus is less useful for claim construction purposes”). “The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was *disclaimed* during prosecution,” not to broaden terms beyond their consistent usage in the specification. *See id.* (quoting *Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005)) (emphasis added). Although it is well settled that a narrowing amendment has preclusive effect on claim construction, LMA fails to cite even a single case supporting its proposition that an amendment that removes clarifying language somehow supports a claim interpretation not otherwise supported by the specification.

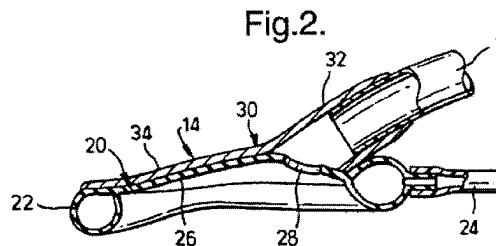
3. LMA’s Construction is Inconsistent with the Accepted Meaning of the Term Backplate and Its Own Use of the Term.

LMA’s proposed construction also runs afoul of the customary use of the “backplate” in the industry at the time patent was filed, and still today. As set forth in Dr. Lampotang’s declarations, at the time the application leading to the ‘100 patent was filed, a person of ordinary skill in the art understood a backplate to be separate from an airway tube and to include a tube joint. Moreover, that meaning has not changed, and persons of ordinary skill in the art still understand the term “backplate” in the same way.

The cited prior art of the ‘100 patent confirms that a backplate is separate from an airway tube and includes a tube joint. *See Kumar v. Ovonic Battery Co. Inc.*, 351 F.3d 1364 (Fed. Cir. 2003) (The prosecution history discussed a prior art patent that defined “amorphous” in the field of metallurgy as meaning “lacking a crystalline structure.” The court applied this definition,

rather than a broader definition proposed by the plaintiff from the dictionary, because it evidenced how one of ordinary skill in the art would -- and would not -- define the term at the time).

Figure 2 from the '116 Application, depicted below, teaches a laryngeal mask comprising a "backing member" 34 (i.e. backplate) that extends from sealing member 22 (i.e. cuff) to the airway tube 1. Dr. Lampotang Opening Decl. ¶ 22, Ex. F. The backplate, in turn, comprises a tube joint, referred to as a "mount member" 30, including a tubular extension 32, that is used to connect the backplate to the airway tube 1. Dr. Lampotang Resp. Decl. at ¶ 24.



This confirms the usage in the relevant field at the time of the invention.

LMA has lodged, as physical evidence, samples of LMA's and Ambu's laryngeal masks. Those masks, as described in LMA's own promotional materials, further demonstrate that a person of ordinary skill in the art, and even LMA itself, understands "backplate" to have a much narrower construction than that now proposed by LMA. Indeed, as shown below, LMA has stressed the importance of distinguishing between masks constructed of a backplate and an airway tube, on the one hand, and those consisting only of a larger airway tube (without a backplate), on the other hand. In an LMA-prepared summary of a study led by Dr. David Ferson, which LMA continues to distribute to current and prospective customers, LMA describes the design of two competing laryngeal masks, including Ambu's, noting that both lack a backplate. *See* Faigal Decl. ¶ 8, Ex. G ("A Comparative Anatomical Study of Laryngeal Masks.")

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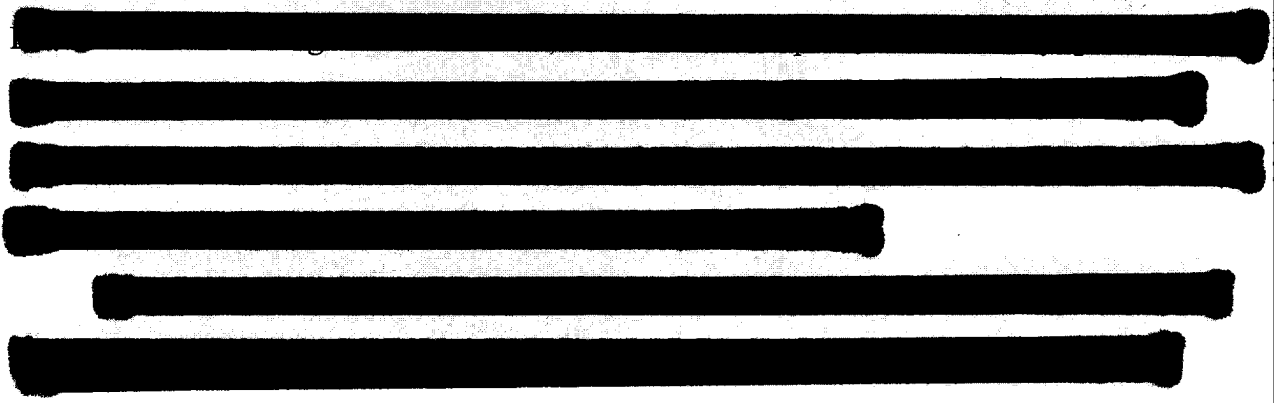
Inserting the masks
For use, the mask is inserted into the mouth of the patient. The mask is then inflated with air from the Ambu® LMA™ mask, which inflates the tapered leading edge of the LMA™ mask and the back plate, using the mask's pre-inflated air. The Ambu® Laryngeal Mask (LMA) pre-curved airway tube makes insertion easy.

A larger diameter airway tube. **No back plate.**

A larger and more rigid pre-curved airway tube. **No back plate.**

Portex Soft Seal™
The soft seal is at the tip of the airway tube. A larger diameter airway tube (Portex) is attached to the airway tube.

Ambu™ Laryngeal Mask
Clear to view the LMA™ mask. Not inflated. A larger and more rigid pre-curved airway tube. The back plate. No separate back plate. Inflated like a back plate. In use.



Side-by-side, the **differences are obvious** even to the untrained eye.

Comparing the masks

When in the early 1980s Dr. Portex began developing the LMA™ mask, it was designed for the purpose of providing a secure airway for the patient. The LMA™ mask is a pre-curved airway tube with a soft seal at the tip. The LMA™ mask is attached to the airway tube. The LMA™ mask is inflated with air from the Ambu® LMA™ mask, which inflates the tapered leading edge of the LMA™ mask and the back plate, using the mask's pre-inflated air. The Ambu® Laryngeal Mask (LMA) pre-curved airway tube makes insertion easy.

LMA™ air way
The LMA™ air way is a pre-curved airway tube with a soft seal at the tip. The LMA™ mask is attached to the airway tube. The LMA™ mask is inflated with air from the Ambu® LMA™ mask, which inflates the tapered leading edge of the LMA™ mask and the back plate, using the mask's pre-inflated air. The Ambu® Laryngeal Mask (LMA) pre-curved airway tube makes insertion easy.

The **back plate**, deep at the rear, becomes shallower at the front.

Importantly, the use of the term “backplate” in these materials is consistent with the description of “backplate” in the specification of the ‘100 patent, as well as Ambu’s proposed construction. Specifically, an airway tube that is extended to the opening of the mask, rather than one that is attached to a tube joint, is not considered to be a “backplate.” The extrinsic evidence is consistent with the intrinsic evidence, both of which show that LMA’s construction is incorrect, and thus Ambu’s construction should be adopted. *Plant Genetic Sys., N.V. v. Dekalb Genetics*

Corp., 315 F.3d 1355, 1346 (Fed. Cir. 2003) (holding that “it is entirely appropriate, perhaps even preferable, for a court to consult trustworthy extrinsic evidence to ensure that the claim construction ... is not inconsistent with clearly expressed, plainly apposite and widely held understandings in the pertinent technical field”) (“quoting *Pittney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999)).

4. Ambu’s Construction of “Cuff Being Attached to the Backplate” as Used in Claim 1 Does Not Improperly Import a Method Limitation

The cuff and backplate must be separate structures given the ordinary meaning of the term “attached.” The claims and the written description of the ‘100 patent consistently use the term “attached” in a sense of its ordinary meaning, *i.e.*, “made fast (as by tying or gluing).” *See* Ambu’s Opening Claim Construction Brief at 18-19; Dr. Lampotang Opening Decl. Ex. K (dictionary definition of “attached”); Dr. Lampotang Resp. Decl. ¶ 27. LMA’s construction of the phrase “cuff being attached to the backplate” to encompass an integral structure that includes a cuff and a backplate formed together in one structure would read out entirely the “attached” limitation and thereby impermissibly broaden the scope of the claims.

First, LMA improperly contends that it would be error to define the term “attached” to refer to two elements having been affixed to each other, because that would improperly add a “process” limitation into method claims. LMA’s contention does not stand up to scrutiny; it leaves out the basic principal that structural elements in an apparatus claim can be expressed in functional terms. *See Miken Composites, L.L.C. v. Wilson Sporting Goods Co.*, 515 F.3d 1331, 1337-38 (Fed. Cir. 2008). In *Miken*, the patentee argued that the district court improperly imported a process limitation into a product claim when the court construed the noun form of the claim term “insert” to mean “something inserted or intended for insertion,” based on its ordinary meaning. *Id.* at 1337. The Federal Circuit expressly rejected the patentee’s argument and reasoned that “that this ordinary meaning has functional attributes does not change the fact that the claim recites a structural component.” *Id.* at 1337-38.⁴

⁴ Moreover, in *Microprocessor Enhancement Corp. v. Texas Instruments*, a case cited by LMA (Pl.’s Opening Claim Construction Brief at 14 n.6), the Federal Circuit held that apparatus claims

1 Similarly, here, the functional attributes of the term “attached” do not turn the phrase
2 “cuff attached to the backplate” into a process limitation. Consequently, LMA’s reliance on
3 *Bandag, Inc. v. Al Boser’s Tire Stores, Inc.*, 750 F.2d 903 (Fed. Cir. 1984), to differentiate a
4 method claim from an apparatus claim is misplaced. Moreover, in *Bandag*, the court did not
5 distinguish between apparatus and method claims to construe any claim terms, and thus provides
6 no guidance in this regard.

7 Second, LMA’s contention based on a distinction between the verb and adjective forms of
8 the term “attached” is equally unavailing. Courts have routinely used the definition of a verb to
9 interpret a claim term using the adjectival form of the verb. *See, e.g., Tuna Processors, Inc. v.*
10 *Haw. Int’l Seafood, Inc.*, 2007 U.S. Dist. LEXIS 77396, at *20 (D. Haw. Oct. 17, 2007) (holding
11 that the word “cooled” as in claim term “cooled smoke” is a participial adjective “formed from
12 the past participle” of the verb “cool”); *Pfund v. United States*, 40 Fed. Cl. 313, 324 (Fed. Cl.
13 1998) (using definition of the verb “space” to construe its adjective form “spaced” in claim term
14 “spaced station”); *Multiform Desiccants v. Medzam, Ltd.*, 1995 U.S. Dist. LEXIS 18548, at *15-
15 16 (W.D.N.Y. Dec. 7, 1995) (“A commodious definition of the verb ‘degrade’ alludes to the
16 patentee’s intended meaning of the adjective ‘degradable’ as used in Claims 1 & 6.”). The word
17 “attached” is a participial adjective derived from the past participle of the verb “attach.”
18 Therefore, although Claim 1 is an apparatus claim, it is appropriate to construe “attached” as the
19 result of a process.

20 Third, the definitions of “attached” in LMA’s cited dictionary (The Random House
21 College Dictionary) do not support LMA’s construction that “the cuff being attached to the
22 backplate” encompasses a structure where the cuff and backplate form a unitary structure. The
23 dictionary cited by LMA defines “attached” as follows: “attached, adj. 1. joined, connected,
24 bound. 2. *Zool.* Permanently fixed to the substratum; sessile.” *See* Plaintiff’s Opening Brief at
25 13; Faigal Decl. ¶ 6, Ex. E (Joint Claim Construction Chart). None of these definitions suggest a
26 unitary structure.

27
28 are not *per se* indefinite for using functional or method language. 520 F.3d 1367, 1374-75 (Fed.
Cir. 2008).

Finally, the '100 patent specification makes clear that a laryngeal mask "extruded as a single, unitary piece" is merely an "alternative," and therefore different from, one that is constructed by attaching the backplate to the main-cuff. Faigal Decl. ¶ 6, Ex. 5 ('100 patent, col. 6, ll. 11-25). Indeed, LMA has admitted in its own documents that laryngeal masks having a unitary formation, such as Ambu's products, "do not have a backplate." Faigal Decl. ¶ 5, Ex. D.

B. The Court Should Adopt Ambu's Construction of the Claim 1's Phrase "At Least a Portion of the Posterior Portion of a Wall of the Cuff in the Distal Region Being Thicker and Dtiffer than other Portions of the Cuff."

1. LMA's Proposed Construction for the Claim Phrase Contradicts the Intrinsic Evidence.

Although the phrase "at least a portion of the posterior portion of a wall of the cuff in the distal region being thicker and stiffer than other portions of the cuff" consists of words with ordinary meanings, LMA is wrong to suggest that the phrase does not require construction. The parties dispute the meaning of the phrase, and since their dispute is material to the infringement analysis in this case, it should be construed. *See O2 Micro*, 521 F.3d 1351; *Seachange*, 413 F.3d 1361.

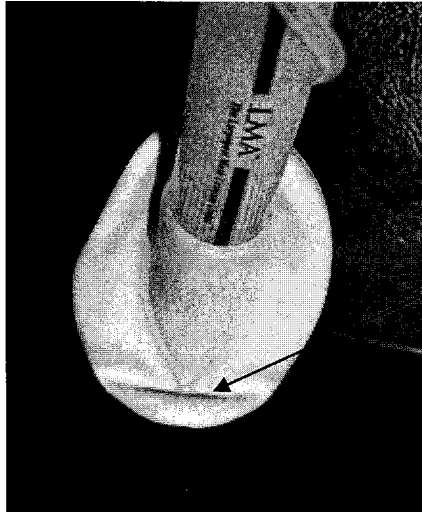
Claim 1 of the '100 patent recites "at least a portion of the posterior portion of a wall of the cuff in the distal region being thicker and stiffer than other portions of the cuff." Dependent claim 3 recites "A device according to claim 1, the portion of the posterior portion of the wall forming a distal rib." The task for the Court, therefore, is to define the portion of the cuff wall that is thicker and stiffer from claim 1, without limiting it to the rib of claim 3, but yet without broadening it impermissibly beyond what the applicant described as invention. The only way in which to construe claim 1, then, is to hold that the phrase means "A portion of the posterior wall of the cuff where it attaches to the distal end of the backplate is thickened and stiffened by a reinforcement extending from the distal end of the backplate." Ambu's Opening Brief at 19-20.

Phillips counsels that review of the specification is "usually dispositive" of the claim construction. *Phillips*, 415 F.3d at 1315. Review of the specification here shows that the only embodiment taught of the "thicker and stiffer" portion of the posterior portion of the cuff wall in the distal area of the cuff is a reinforcing rib. There can be no dispute that in each instance

1 taught, this reinforcing rib is an extension of the backplate. There is simply no disclosure
 2 anywhere in the ‘100 patent of a means to reinforce the cuff wall other than by an extension of the
 3 backplate. Moreover, the specification specifically clarifies that when the “reinforcing rib” is
 4 achieved by thickening the cuff, “the thickening of the posterior wall . . . *forms a distal extension*
 5 *of the bowl of the backplate.*” Dr. Lampotang Opening Decl. Ex. C (‘100 patent col. 8, lns. 9-12)
 6 (emphasis added). Tellingly, LMA cites the first half of this sentence to support its proposed
 7 construction, but tries to disregard the fact that the rest of the sentence unequivocally describes
 8 the reinforcement as “a distal extension of the bowl 90a of the backplate 52a.” *See* Plaintiff’s
 9 Construction Brief at 4.

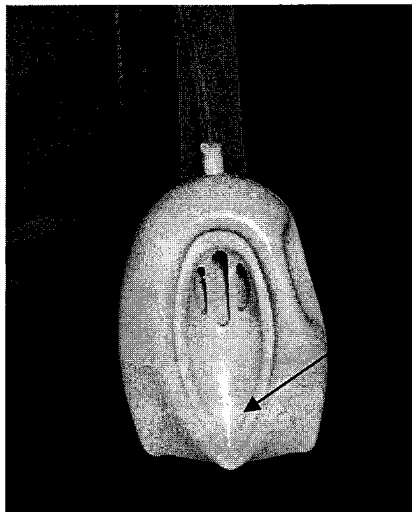
10 In addition, the thicker and stiffer reinforcement of the cuff wall necessarily must extend
 11 from the backplate to the cuff in order for the invention to achieve its purported goal. As the
 12 opening sentence in the “Summary of the Invention” states, “[t]he present invention seeks to
 13 eliminate the disadvantages associated with such undesirable insertion by minimizing the risk of
 14 the deflated cuff formation becoming folding over on itself during the insertion procedure.” Dr.
 15 Lampotang Resp. Decl. ¶ 9; ‘100 patent at col. 1, lns. 48-51 Dr. Lampotang Opening Decl., Ex C
 16 [‘100 patent at col. 1, lns. 48-51.] As the next sentence unequivocally states, the ‘100 patent
 17 solves this problem “by incorporating into the cuff at its distal end a reinforcing rib which serves
 18 to stiffen the leading end of the LMA-device during the course of the procedure for its insertion.”
 19 *See* Dr. Lampotang Resp. Decl. ¶ 9; ‘100 patent col.1, lns. 51-55, Dr. Lampotang Opening Decl.,
 20 Ex. C. The folding over of the cuff occurs when the leading (distal) tip of the cuff gets caught on
 21 some obstruction (for example, tissue in the throat) during insertion of the device. *See* Dr.
 22 Lampotang Resp. Decl. ¶ 10. When the cuff folds back, the crease of the fold occurs at the tip of
 23 backplate, as the backplate is sufficiently stiff not to fold back, thus causing the cuff to fold over
 24 the tip of the backplate. *See id.* As such, the ‘100 patent aims to prevent such fold over by
 25 reinforcing the portion of the cuff that folds over the backplate – that is, the region of the cuff
 26 between the tip of the backplate and the tip of the cuff. *See id.* The ‘100 patent teaches solving
 27 the problem through an extension of the backplate, as that approach helps to ensure that the cuff
 28 cannot fold over the backplate. *See id.* The image below demonstrates that the folding over of

the cuff occurs at the tip of the backplate:



Cuff folds over at the tip of the more rigid distal end of mask/backplate

Faigal Decl. ¶ 8, Ex. G. The '100 patent notes that a problem with prior art laryngeal masks, and a problem that it purports to solve, is that the “more distal end of the mask to catch the inside throat and subject the patient to undesirable forces.” Dr. Lampotang Opening Decl. Ex. C (‘100 patent col. 1, lns. 30-35). The image below shows how the tip of the backplate of the mask would become exposed and could catch the throat during insertion.

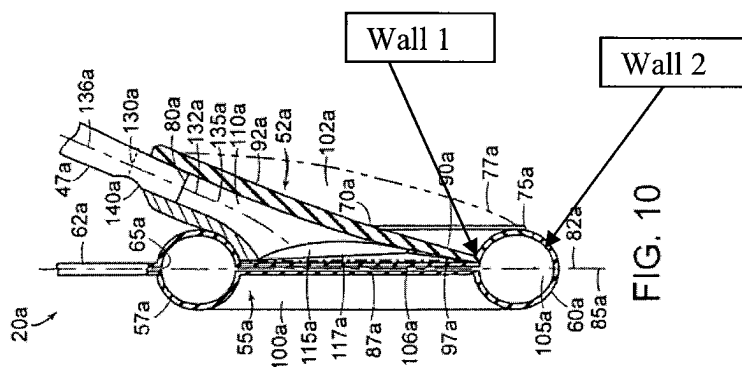


The end of the backplate becomes exposed when cuff folds over

Faigal Decl. ¶ 8, Ex. G. LMA contends that the reinforcement of the cuff need not be an extension of the backplate, and indeed asserts that there could be an unreinforced gap between the backplate and the reinforcement of the cuff. [REDACTED]

Therefore, LMA's proposed construction cannot stand because it would result in embodiments that fail to achieve the patent's stated goal. *Phillips*, 415 F.3d at 1323.

The use of the term "wall" in the claim language further confirms that the reinforcement of the cuff must be an extension of the backplate. *See* Dr. Lampotang Resp. Decl. ¶ 18. A wall is generally a structure that stands vertical to a set plane. *Id.* This understanding is supported by the claim language and specification, as the patentee did not refer to the reinforcement of merely the surface of the cuff, which would extend circumferentially around the cuff, but rather to the wall. *Id.* In this case, the wall of the cuff is that portion that stands vertical to the plane of the bowl/cuff. *Id.* As such, the reinforcement of the cuff, which is located in the posterior part of the cuff, must be located at one of the parts of the cuff identified below: *Id.*



Given the problem that the invention seeks to solve, folding over of the cuff, the wall referred to in claim 1 must be that identified as "wall 1" above, for if "wall 2" were the reinforced wall, such a design would not prevent the cuff from folding over itself, as the reinforced part of the cuff would fold over the unreinforced portion. *Id.* The wall of the cuff identified above as "wall 1" is the wall that makes contact with the backplate, thus further demonstrating that the reinforcement of the cuff must be an extension of the backplate. *Id.*

Notably, the phrase provides that "at least a portion of the posterior portion of a wall of the cuff in the distal region being thicker and stiffer than other portions of the cuff." It does not say that the portion of the cuff wall is thicker and stiffer than other portions of the cuff wall. Therefore, the cuff wall must be differentiated from the cuff. However, LMA's proposed construction tries to ignore this distinction and claim, instead, that the wall of the cuff is the same

1 as the cuff. The reinforcement must be at the junction of the backplate and the cuff because it is
 2 the only portion of the cuff that is the cuff wall and is part of the posterior portion of the cuff wall
 3 in the distal region.

4 Additionally, the prosecution history does not support LMA's proposed construction.
 5 Again relying on a wholly unsupported proposition, LMA argues that, because a backplate
 6 extension was expressly recited in an earlier proposed claim but not in an issued claim, the
 7 backplate extension cannot be required by the issued claim. As discussed above, LMA's
 8 argument cannot stand because a patentee's unilateral removal of clarifying language in claims
 9 does not indicate the PTO's understanding of the invention that it allowed. *See Honeywell*, 452
 10 F.3d at 1319 ("Where, as here, the written description clearly identifies what his invention is, an
 11 expression by the patentee during prosecution that he intends his claims to cover more than what
 12 his specification discloses is entitled to little weight.").

13 **2. The Reinforcement of the Cuff's Wall Must be Thicker and Stiffer** 14 **than Any Other Portion of the Cuff's Wall.**

15 In Plaintiffs' Opening Brief, LMA asserts that the claim language, stating that "at least a
 16 portion of the posterior portion of a wall of the cuff in the distal region being thicker and stiffer
 17 than other portions for the cuff," does not require the "thicker and stiffer" portion to be thicker and
 18 stiffer than all other portions of the cuff. LMA's construction is inconsistent with the invention
 19 taught by the '100 patent and with how a person of ordinary skill in the art would understand that
 20 language. Dr. Lampotang Resp. Decl. ¶ 19.

21 Based on the claim language, alone, a person of ordinary skill in the art would understand
 22 that the reinforcement of the cuff is thicker and stiffer than all other portions of the cuff. The
 23 language states that the reinforced portion of the cuff is "thicker and stiffer than other portions of
 24 the cuff" without limitation. It does not state that the reinforcement is thicker and stiffer than
 25 some other portions or substantially all other portions of the cuff. As such, a person of ordinary
 26 skill in the art would understand "other portions of the cuff" to mean those portions of the cuff
 27 except for the reinforced portion referred to in the claim language. *Id.* at ¶ 20.

28 LMA's proposed construction is also contrary to the well-established purpose of a cuff.

1 The cuff is the part of the laryngeal mask that forms the seal over the laryngeal inlet. *Id.* at ¶ 21.
 2 Given the variable surface of the tissue in that area, cuffs are designed to be uniformly thin, as
 3 taught by the ‘100 patent, so as to make them as pliable as possible, thus enabling them to mold to
 4 the shape of the patient’s throat and enabling a tighter seal over the laryngeal inlet. *Id.* Indeed, a
 5 significant goal of the ‘100 patent’s reinforcement of the cuff is to assure that the cuff does not
 6 become folded back, “thereby obstructing the creation of the seal around the patient’s laryngeal
 7 inlet and hence obstructing formation of a full enclosed airway to the patient’s lungs.” *Id.* At Ex.
 8 C, (‘100 patent, col. 1, lns. 36-40). Under LMA’s construction, however, portions of the anterior
 9 side of the cuff could be thicker and stiffer than the reinforced part of the cuff. *Id.* Such a
 10 construction would run contrary to the purpose of a cuff and even the stated purpose of the
 11 invention, as a significant purpose of preventing cuff fold over is to ensure that cuff achieves a
 12 complete seal when the device is inserted. *Id.* Moreover, there is simply no teaching in the
 13 specification that such an alternative is to be considered a part of the invention. None of the
 14 embodiments in the specification provide an example of such construction. *On Demand Machine*
 15 *Corp.* 442 F. 3d at 338 (“the scope and outer boundary of the claims is set by the patentee’s
 16 description of the invention”).

17 LMA feigns ignorance on this point, but Ambu’s contention has been that if LMA’s
 18 construction is adopted, the claim will be indefinite as there will be no way of determining
 19 whether there has been infringement. LMA itself has cited a number of cases that explain why it
 20 is important for the claim construction to provide meaningful reference points. For example,
 21 LMA cited *Exxon Res. & Eng’g Co. v. United States* 265 F. 3d 1371 (Fed. Cir. 2001) (LMA
 22 Opening Brief at 14, note 6). In that case, one of the claim construction disputes was over what it
 23 meant to “substantially increase” catalyst activity. The Federal Circuit reviewed the specification
 24 and found that in the specification, two figures reflected using a subtraction method of
 25 calculation, added that into the claim construction and reversed the finding of indefiniteness.
 26 Accordingly, what this case really stands for is the importance of defining terms in the context of
 27 the specification. Where no such reference point can be found, then the claim term is indefinite.
 28 Similarly, LMA quoted from *Honeywell, Inc. v. ITC*, 341 F.3d 1332 (Fed. Cir. 2003). There, a

claim was held to be indefinite because no reference point was provided for determining whether the specified “melting point elevation” had been reached.

C. **LMA’s Proposed Construction of the Phrase “Distal Rib” from Claim 3 Both Runs Afoul of the Prior Art and Contradicts the Ordinary Meaning of the Term “Rib.”**

LMA argues that the “distal rib” as found in claim 3 of the ‘100 patent does not need to be rib-shaped. Instead, LMA argues that a “rib” can adopt any shape so long as it is smaller than the portion of the cuff it stiffens or reinforces. There are several problems with LMA’s argument.

First, LMA’s argument provides no meaning to the term “rib.” Instead, LMA argues that “rib” is anything that stiffens or reinforces. Pl.’s Opening Claim Construction Brief at 19. But such a broad construction renders the use of the word “rib” superfluous. The dictionary definitions relied on by LMA do not support LMA’s broad construction. LMA’s cited dictionary definition establishes that a rib is not just smaller than the object which it reinforces, as LMA concedes, but has an elongated shape: “a framing timber in a house,” “the frame of a ship,” and “a stiff strip (as of metal) supporting the fabric in an umbrella.” *See* Plaintiff’s Opening Claim Construction Brief at 19-20. Such extrinsic evidence is consistent with Ambu’s proposed construction of “an extension of the backplate that is rib-shaped, narrower than the diameter of the tube adapted to fit the tube joint, and more rigid than the cuff, but less rigid than the backplate, that reinforces and stiffens the region of the cuff extending from the bowl of the backplate in a downturned orientation.” Faigal Decl. ¶ 6, Ex. E (Joint Claim Construction Chart).

Second, LMA’s construction would make the claim read on prior art cited during prosecution, and over which LMA obtained its patent. *See Cat Tech LLC v. Tubemaster, Inc.*, 528 F.3d 871, 886 (Fed Cir. 2008) (affirming the narrow construction of the term “a spacing” where a broader length of the spacing would read on the prior art that the patentee distinguished the patent from during prosecution); *N. Am. Container v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 1345 (Fed. Cir. 2005) (to overcome an obviousness rejection, applicant distinguished his invention based on prior art disclosing “slightly concave” inner walls; the “inescapable consequence of such an argument is that the scope of applicant’s claims cannot cover inner walls that are ‘slightly concave’”). One of the prior art references cited during prosecution, European

1 patent application, EP0732116A2 (“Pagan ‘116”) discloses a laryngeal mask device with a
2 reinforcing backplate 34 located on the anterior wall of the cuff and extending to the distal region
3 of the cuff. See Dr. Lampotang Opening Decl., Ex. I, Office Action, 10/19/2005, at 3; Ex. F
4 (Pagan ‘116, col. 3, lns. 4-6, Figs. 2-3). Notably, the backplate in Pagan ‘116 is smaller than the
5 portion of the cuff which it reinforces and would fit squarely within the definition of “distal rib”
6 now urged by LMA. Given that the Examiner stated that “the distal rib [in Pagan ‘116] is not
7 clearly defined,” he must have understood “distal rib” to mean something not disclosed in Pagan.
8 See Dr. Lampotang Opening Decl., Ex. I, Office Action, 10/19/2005, at 3.

9 LMA criticized Ambu for using the term “rib-shaped” to construe the phrase distal rib.
10 However, this was only made necessary by LMA’s insistence during the meet and confer on
11 claim construction that a “rib” can have any shape. Given that Ambu does not agree with that
12 construction, and that this issue is key to core issues in the case, it should be resolved at this
13 juncture in the form of a claim construction that clearly rejects LMA’s construction and makes
14 clear that a rib must be “rib shaped.” See *O2 Micro*, 521 F.3d at 1361-1362 (the district court’s
15 failure to construe the term “only if” was error because the parties disputed the term’s meaning,
16 and the term’s construction was critical issue to determining the patent’s scope). In addition,
17 when there is a dispute like this, there is nothing improper about using a common term “rib-
18 shaped” to construe the phrase “distal rib” even though that common term is part of the phrase to
19 be construed. See *Miken Composite*, 515 F.3d at 1337 (defining claim term “insert” in the sense
20 of its ordinary meaning as “something inserted or intended for insertion”).

21 Next, nothing in Ambu’s construction requires that a “rib” be curved. As LMA’s own
22 dictionary definition suggests, it may also be substantially straight, such as “a framing timber in a
23 house.” Pl.’s Opening Claim Construction Brief at 20.

24 Finally, LMA cited *Conoco, Inc. v. Energy & Envt’l, L.C.*, 460 F.3d 1349 (Fed. Cir. 2006)
25 for the proposition that limitations about the rib should not be read in from the specification. The
26 claim language at issue there was “a water-alcohol mixture,” and the question raised was how
27 much alcohol had to be in the mixture. The district court properly refused to limit the amount of
28 alcohol to less than 60%. The specification said that the amount of alcohol “employed in the

suspending material *may vary widely* but it *usually* forms between about 0 and 70 weight percent of the suspending material.” The facts are thus distinctly different than those here, where no such wide range of embodiments is taught.

D. LMA’s Proposed Construction of the Phrase “Longitudinal Distal Rib” from Claim 4 Would Make the Term “Longitudinal” Superfluous.

The parties agree that the phrase “longitudinal distal rib” describes a distal rib running lengthwise. The term “longitudinal” distinguishes a distal rib that runs in another direction, for example, widthwise. Ambu’s use of the phrase “in the direction of the proximal end of the mask” simply clarifies that the rib’s orientation runs from the distal end to the proximal end. Contrary to LMA’s assertion, this is not redundant with “lengthwise” because length versus width are relative terms, where a body’s width is generally shorter than the body’s length. The laryngeal mask assembly could be shorter in the distal to proximal than in its cross section. Ambu’s construction accounts for this by ensuring that the rib runs in the distal to proximal direction.

Further, a rib that runs longitudinally is only meaningful if the shape of the distal rib is elongated. For example, if the distal rib is round or square-shaped, as permitted under LMA’s construction, the modifier “longitudinal” would be superfluous because it would not run in any direction. Therefore, Ambu’s construction does not import limitations from the specification or limit the term to a preferred embodiment. Again, LMA mischaracterizes Ambu’s proper use of the patent specification as a guide to understanding the meaning of the claims. Pl.’s Opening Claim Construction Brief at 22.

E. LMA’s Proposed Construction of the Phrase “Proximal Portion of the Passage” and “Passage Axis” Renders Claim 6 Indefinite.

For written support of the term “passage axis,” LMA points to the central axis 132 of the backplate passage 110 described in the specification, but then argues that the term “passage axis” has nothing to do with a tube-joint element at the proximal end of the backplate. LMA’s argument misses the mark. LMA ignores the written disclosure that “the inclination of the tube-joint 92 may be defined by a tube-joint axis 136 . . . which *coincides* with the central axis 132 at its intersection with the cross-section of the *proximal end* 130.” (‘100 patent, col. 7, lns. 13-17) In fact, the “central axis 132” cited by LMA and the “tube-joint axis 136” cited by Ambu from

the specification mean the same thing at the proximal end of the backplate passage.

Moreover, LMA's attempt to construe the "passage axis" as "an imaginary straight line" does not make sense. Pl.'s Opening Claim Construction Brief at 23. LMA has claimed an "apparatus," which in order to be patentable has to be a "useful...machine." 35 U.S.C. Section 101. The Supreme Court has defined a "machine" as "a concrete thing, consisting of parts, or of certain devices and combination of devices." *Burr v. Duryee*, 68 U.S. 531, 570 (1863). An imaginary line is not "made of 'parts' or 'devices' in any mechanical sense," and so adopting LMA's claim construction would result in making claim 6 invalid for the absence of patentable subject matter. *Cf. In re Nuijten*, 500 F.3d 1346, 1355 (Fed. Cir. 2007) (transitory signals not patentable).

The real dispute lies with whether there should be a defined structural boundary (*i.e.*, a tube-joint) at the proximal end of the backplate. LMA incorrectly argues that no such boundary is necessary. However, the term "proximal portion of the passage" only makes sense if the backplate has a defined boundary at its proximal end. In all of the embodiments and all of the discussion in the specification, that boundary is the tube-joint. The tube joint is thus a necessary referent so that the scope of the claim may be understood. *See Exxon Res. & Eng'g Co*, 265 F. 3d at 1377 (in reversing a finding of indefiniteness, the court construed the term "to increase substantially," referring to catalyst activity, by adding a subtraction method of calculation found in two figures in the specification); *Honeywell*, 341 F.3d at 1339-40 (holding that claim was indefinite because no reference point was provided for determining whether the specified "melting point elevation" had been reached). Moreover, the specification indicates that the backplate passage may be curved. Without a reference point, it is yet more difficult to place the recited straight line.

Accordingly, Ambu's construction of this term as "the tube joint axis" should be adopted. Ambu's Opening Brief at 28.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule 5.2 on January 14, 2009

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